

REMARKS/ARGUMENTS

This amendment is responsive to the Office Action of May 20, 2009.

Claims 1, 7, 13, 27, and 28 have been amended. Claims 19-26 were previously canceled without prejudice. Applicant reserves and retains the right to pursue the subject matter of claims 19-26 in this application and/or in one or more continuation or divisional applications. No claims have been canceled and no new claims were added. Accordingly, claims 1-18, 27, and 28 are pending.

The amendments to the claims present no new matter. In particular, the amendments are only for purposes of clarifying the language of the claims and to adjust punctuation thereof.

Reconsideration of the application as amended is respectfully requested.

The Office Action

Claims 1, 7, 13, 27, and 28 were rejected in the Office Action of May 20, 2009 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 8, 15, and 22-25 of U.S. Patent No. 6,493,720 (*hereinafter*, “the ‘720 patent”). Also in the Action, claims 1-18 and 27-28 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,236,994 to Swartz et al. (*hereinafter*, “Swartz”).

In view of the amendments and arguments set forth below, it is submitted that all pending claims are patentably distinct over the art of record.

The Non-Art Matters

As noted above, claims 1, 7, 13, 27, and 28 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 8, 15, and 22-25 of the ‘720 patent. The Examiner took the position that

Without conceding the Examiner’s position with regard to claims 1, 7, 13, 27, and 28 of the present application as compared with claims 1, 8, 15, and 22-25 of the ‘720 patent, applicant has tendered selected amendments to independent claims 1, 7, 13, 27, and 28 herein for clarifying the relation between the first target data object, the transformation, the first source data, the second target data object, and the second source data.

It is respectfully submitted that the claims as amended are patentably distinct and unobvious over the art of record including claims 1, 8, 15, and 22-25 of applicants earlier '720 patent.

In addition, as to the claims prior to the instant amendment, applicant disagrees with the Examiner's position that "the only difference between the claimed invention and the patented claims is that the patented claims are focus (sic.) on catalog metadata synchronizing and instant (sic.) claims not only claimed the metadata synchronizing but also details the navigation process of the claimed tool." Applicant also respectfully disagrees that it would have been obvious to combine the alleged teachings of Swartz with the claims of applicant's own '720 patent. Applicant further respectfully disagrees that even if the alleged teachings of Swartz were combined with the claims of applicant's own '720 patent, the result would not render claims 1, 7, 13, 27, and 28 of the instant application obvious.

First, the differences between the claimed invention and the patented claims go far beyond the navigation process of the claimed tool. For example, in claim 1 of the '720 patent, a monitoring tool operates on an object to identify changes to metadata of that object. The monitoring tool operates at specific intervals. There is no such feature recited in the independent claims of the present application.

In addition, in claim 1 of the '720 patent for example, the specific interval for the operating of the monitoring is stored in an information catalog. There are no such features recited in the independent claims of the present application.

Still further, in claim 1 of the '720 patent, the information catalog containing corresponding metadata for the object is updated when changes to the metadata are identified. Again, there are no such features recited in the independent claims of the present application.

Conversely, the claims of the present application differ significantly from the claims of applicant's patent identified by the Examiner. In claim 1 of the present application, for example, first source data is registered in an information catalog. In response to receiving input from a user navigating a plurality of data objects stored in the information catalog, a first target data object in the information catalog is selected. Transformation lineage information is provided about the first source data from which the first target data object was derived via a transformation performed on the first source data to derive the first target data object. Transformation model information of the transformation performed on the first source data to

derive the first target data object is provided. The transformation model information provides a user with transformation producing function information of the first target data object including a derivation of the first target data object from the first source data. A change in the registered first source data as changed source data is detected using a metadata synchronizer, and the metadata in the information catalog is updated to reflect the detected change, and the changed source data is registered in the information catalog. A second target data object is selected. The second target data object is related to the changed source data by the transformation performed on the changed source data to derive the second target data object. Updated transformation lineage information is provided about the changed source data from which the second target data object was derived via the transformation performed on the changed source data to derive the second target data object.

Again, the claims of applicant's prior '720 patent disclose a method of synchronizing data stored on a data storage device connected to a computer wherein an information catalog storing a synchronizing time determining specific intervals is provided. A tool that operates on an object to identify changes to metadata of that object is monitored at the specific intervals. When changes to the metadata are identified, the information catalog containing corresponding metadata for the object is updated.

Therefore, it is respectfully submitted that the claims of the '720 patent do not teach or suggest many of the features of the claims pending in the instant application including but not limited to providing transformation lineage information, providing transformation model information or detecting changes in registered source data.

The Examiner has not articulated a *prima facie* case of obviousness including because the differences between the pending claims and those of the '720 patent were not identified and because the Examiner has not demonstrated or entered into the record reasons why the identified differences between the pending claims and the claims of the '720 patent were obvious at the time of the invention.

A withdrawal of the obviousness-type double patenting rejection is therefore respectfully requested.

The Art Matters

As further noted above, claims 1-18 and 27-28 were rejected under 35 U.S.C. §102(e) as being anticipated by Swartz. Applicant respectfully traverses this rejection for at least the reasons set out below.

It is well known that for a reference to anticipate claims each and every element recited in the claims must be disclosed identically in the art reference. That is, the Examiner must identify, in a single art reference, each and every element recited in the pending claims.

It is respectfully submitted that the Examiner has not met this burden.

Claims 1-6 are Allowable

Independent claim 1 is directed to a method of navigating data stored on a data storage device connected to a computer. The method comprises registering first source data in an information catalog and, in response to receiving input from a user navigating a plurality of data objects stored in an information catalog, selecting a first target data object in the information catalog. Transformation lineage information is provided, the transformation lineage information regarding first source data from which the first target data object was derived via a transformation performed on the first source data to derive the first target data object. Transformation model information is provided, the transformation model information regarding the transformation performed on the first source data to derive the first target data object, the transformation model information providing a user with transformation producing function information of the first target data object including a derivation of the first target data object from the source data. Using a metadata synchronizer, a change in the registered first source data as changed source data is detected, and metadata in the information catalog is updated to reflect the detected change. The changed source data is registered in the information catalog, and a second target data object is selected. The second target data object is related to the changed source data by the transformation performed on the changed source data to derive the second target data object. Updated transformation lineage information is provided, the updated transformation lineage information regarding the changed source data from which the second target data object was derived via the transformation performed on the changed source data to derive the second target data object.

The Examiner cited to the Abstract of Swartz for an alleged teaching of “a method of navigating data stored on a data storage device connected to a computer” such as set out in independent claim 1. However, it is respectfully submitted that this portion of Swartz fails to teach, suggest or fairly disclose navigating data stored on a data storage device connected to a computer or navigating at all. In particular, the Abstract of Swartz only discloses:

The present invention is a method and apparatus for first integrating the operation of various independent software applications directed to the management of information within an enterprise. The system architecture is, however, an expandable architecture, with built-in knowledge integration features that facilitate the monitoring of information flow into, out of, and between the integrated information management applications so as to assimilate knowledge information and facilitate the control of such information. Also included are additional tools which, using the knowledge information enable the more efficient use of the knowledge within an enterprise, including the ability to develop a context for and visualization of such knowledge.

Accordingly, applicant respectfully submits that Swartz does not anticipate independent claim 1 because it lacks a teaching or suggestion of navigating data stored on a data storage device connected to a computer.

Next in the Office Action, the Examiner cited to the “config_Infor In Registry/INI” at columns 15 and 16 of Swartz for an alleged teaching of “registering first source data in an information catalog” such as set out in independent claim 1. However, it is respectfully submitted that this portion of Swartz fails to teach, suggest or fairly disclose registering first source data in an information catalog. In particular, this portion of Swartz only discloses pseudocode for functionality not at all related to the subject matter of the pending claims and, in particular, not at all relating to independent claim 1. As described at columns 15 and 16 of Swartz:

The following pseudocode represents an implementation of the client/server model without separating the client from the server. In other words, the pseudocode is written with a client and server in mind--and appropriately abstracted--however, they may reside in the same executable and may be run from the client PC. In a preferred embodiment, these object sets would be split apart.

Thus, applicant respectfully submits that Swartz does not anticipate independent claim 1 because it lacks, among other things, a teaching or suggestion of registering first source data in an information catalog.

Still further in the Office Action, the Examiner cited to column 3, lines 1-21, column 4, lines 12-67, and Figures 1-15 of Swartz for an alleged teaching of “in response to receiving input from a user navigating a plurality of data objects stored in an information catalog, selecting a first target data object in the information catalog” as set out in independent claim 1 of the instant application. However, it is respectfully submitted that this portion of Swartz fails to teach, suggest or fairly disclose selecting a first target data object in the information catalog in response to receiving input from a user navigating a plurality of data objects stored in an information catalog. In particular, as set out in column 3, lines 1-21 for example, Swartz only discloses:

FileNet's architectural model is based on the client/server computing paradigm. Four types of generic client applications are described, the four main elements include: Searching--the ability to initiate and retrieve information that "indexes" documents across the enterprise by accessing industry standard databases and presenting the results in an easy to use and read format. Viewing--the ability to view all document types and work with them in the most appropriate way, including viewing, playing (video or voice), modifying/editing, annotating, zooming, panning, scrolling, highlighting, etc. Development tools--industry-standard based development tool sets (e.g. Active X, PowerBuilder) that allow customers or their selected application development or integration partners to create specific applications that interface with other applications already existing in the organization. Administrative applications--applications that deliver management and administrative information to users, developers, or system administrators that allow them to optimize tasks, complete business processes or receive data on document properties and functions.

Accordingly, applicant respectfully submits that Swartz does not anticipate independent claim 1 because it lacks, among other things, a teaching or suggestion of navigating a plurality of data objects stored in an information catalog in response to receiving input from a user, and selecting a first target data object in the information catalog.

Yet still further in the Office Action, the Examiner cited to the unit 100 in Figure 3 and the associated text thereof in Swartz for an alleged teaching of “providing transformation lineage information about first source data from which the first target data object was derived via a transformation performed on the first source data to derive the first target data object” as set out in independent claim 1. However, it is respectfully submitted that this portion of Swartz fails to teach, suggest or fairly disclose transformation lineage information or providing transformation lineage information about first source data from which the first target data object was derived via a transformation performed on the first source data to derive the first target data object. In

particular, unit 100 in Figure 3 of Swartz is only an insignificant document management and review block. As disclosed in Swartz at column 10, lines 31-41 thereof:

the document management and review block 100 preferably contains a document review subcomponent 102, that enables a user 101 to review reference and assertion documents stored in the document database 104. The document management and workflow subcomponent 104 also interfaces to the document database 104 at the behest of the user to create, manage or update the documents. As with the data analysis and review functionality, the interface between the subcomponents of the document management and review block 100 and DD-Controller 70 are accomplished via API 80.

Thus, applicant respectfully submits that Swartz does not anticipate independent claim 1 because it lacks, among other things, a teaching or suggestion of transformation lineage information or providing transformation lineage information about first source data from which the first target data object was derived via a transformation performed on the first source data to derive the first target data object.

Still yet further in the Office Action, the Examiner cited to the unit 70 in Figure 3 and the associated text thereof in Swartz for an alleged teaching of “providing transformation model information of the transformation performed on the first source data to derive the first target data object, the transformation model information providing a user with transformation producing function information of the first target data object including a derivation of the first target data object from the source data” as set out in independent claim 1. However, it is respectfully submitted that this portion of Swartz fails to teach, suggest or fairly disclose these features. In particular, this portion of Swartz only discloses a DataDocket Controller component 70, wherein:

At the center of the architecture is the DD-Controller component 70 consisting of Client and Server subcomponents (DD-Client and DD-Server). The DataDocket Controller component controls communications and operations of all DataDocket components. It consists of a multi-threaded server with concurrently operating client software, DD-Server and DD-Client respectively. Design features/objects preferably will include: Maitre d-, Database Communicator, Workhorse, Client, Logger, Administrator, Socket Communicator, JobQueue, ClientMailer, Auditor, Job/Object Status, Transaction Feedback, synchronous/asynchronous operation modes, versioning, etc., the source code for which may be found in the attached Source Code Appendix.

For the client/server component 70 to interface with the various independent applications that may be linked by DataDocket, the system

preferably employs a DataDocket application programming interface (API) 80. API 80 is responsible for communications external to the DD-Controller, enabling the integration between independent software applications (e.g., data analysis software and document management software).

Thus, applicant respectfully submits that Swartz does not anticipate independent claim 1 because it lacks, among other things, a teaching or suggestion of providing transformation model information of a transformation performed on first source data to derive a first target data object and, further, there is no teaching or suggestion of providing a user with transformation producing function information of the first target data object including a derivation of the first target data object from the source data.

The Examiner cited to column 8, line 45 – column 9, line 4, Figures 3-5, and the associated text thereof in Swartz for an alleged teaching of “using a metadata synchronizer, detecting a change in the registered first source data as changed source data, and updating metadata in the information catalog to reflect the detected change” as set out in independent claim 1. However, it is respectfully submitted that this portion of Swartz fails to teach, suggest or fairly disclose detecting a change in the registered first source data or of updating metadata in the information catalog to reflect the detected change. In particular, this portion of Swartz only discloses:

In a preferred embodiment, the present invention would be implemented in one or more phases of complexity, each building on the functionality of the prior by adding more value and addressing a more complex facet of the knowledge integration problem. At a first or basic level, the DataDocket phase automates the process of transferring data analysis reports to a document management system for document production (e.g., regulatory approval submission), synchronizes information flow between a data repository and document repository (and respective documents therein), and provides linkages from the documents back to the data analysis software. Such a system also preferably captures metadata associated with the information shared, stored and accessed by the users of the data so as to characterize the "context" in which the information is being used. As depicted, for example in FIGS. 2A and 2B, the customer data analysis software application (e.g., SAS/PH-Clinical) 50 is separate and distinct from the enterprise document management system (e.g., Documentum or PC Docs) 55. There is no mechanism for communication of information between the two applications. In a simplified form, the communication may be implemented in a point-to-point system 60, where customized software is designed to provide for the transfer and incorporation of

data from the database/analysis application 50 to the documents stored in the document repository software 55. Such a system is, however, of little value beyond solving the problem of communicating from one software application to another.

Thus, applicant respectfully submits that Swartz does not anticipate independent claim 1 because it lacks, among other things, a teaching or suggestion of using a metadata synchronizer, detecting a change in the registered first source data as changed source data, and updating metadata in the information catalog to reflect the detected change as set out in independent claim 1.

The Examiner cited to the alleged use of Admin, Workhorse schema in the table at columns 11-16 of Swartz for an alleged teaching of “registering the changed source data in the information catalog” as set out in independent claim 1. However, it is respectfully submitted that this portion of Swartz fails to teach, suggest or fairly disclose this feature. In particular, this portion of Swartz only discloses pseudocode characterizing a client subcomponent of the DD-Controller 70 disclosed therein which operates concurrently with the DD-Server which is also disclosed. The Examiner has failed to point out any portion of the pseudocode which teaches or suggests changing source data, registering the changed source data, an information catalog, or registering the changed source data in the information catalog.

Thus, applicant respectfully submits that Swartz does not anticipate independent claim 1 because it lacks, among other things, a teaching or suggestion of registering a changed source data in the information catalog as set out in independent claim 1.

The Examiner cited to column 9, lines 19-20, Figures 6-9, and the associated text thereof in Swartz for an alleged teaching of “selecting a second target data object” as set out in independent claim 1. However, it is respectfully submitted that this portion of Swartz fails to teach, suggest or fairly disclose this feature. In particular, column 9, lines 19-20 of Swartz only discloses:

(b) menu-based selection or batch processing of commands;

Further, Figures 6-9 are described in Swartz as being illustrative representations of user interface screens depicting aspects of the system disclosed in Swartz. Applicant respectfully

submits that the user screens themselves do not teach or suggest the selection of a second target object wherein, as in claim 1 of the present application, the second target object is related to changed source data, the second target data object being derived via a transformation performed on the changed source data. The transformation in the claim is the same transformation used to derive a first target data using the transformation on first source data.

Applicant has tendered an amendment to independent claim 1 wherein the relationship between the second target data object and the changed source data is better clarified. In particular, the second target data object is derived via the transformation recited in the claim, by performing the transformation on the changed source data to derive the second target data object.

Thus, applicant respectfully submits that Swartz does not anticipate independent claim 1 because it lacks, among other things, a teaching or suggestion of these features.

The Examiner cited to Figures 11-13 and the associated text thereof in Swartz for an alleged teaching of “providing updated transformation lineage information about the changed source data from which the second target data object was derived via the transformation performed on the changed source data to derive the second target data object” as set out in independent claim 1.

However, it is respectfully submitted that this portion of Swartz fails to teach, suggest or fairly disclose this feature. In particular, this portion of Swartz only discloses user interface screens depicting aspects of the disclosed system. Applicant respectfully submits that the user screens themselves do not teach or suggest a transformation, lineage information, or updated transformation lineage information about changed source data from which a second target data object was derived via a transformation performed on the changed source data to derive the second target data object. These are features of claim 1 in the present application.

Thus, applicant respectfully submits that Swartz does not anticipate independent claim 1 because it lacks, among other things, a teaching or suggestion of these features.

In accordance with the above, therefore, it is respectfully submitted that independent claim 1 and claims 2-6 dependent therefrom are novel, patentably distinct, and unobvious over the art of record including Swartz.

Claims 7-12 are Allowable

The Examiner took the position on the bottom of page 6 of the Office Action that, as to claims 7-12, “these claims recited similar limitations as claims 1-6 in form of apparatus, hence, are rejected for the same reasons.”

Without conceding the Examiner’s position, applicant respectfully submits that independent claim 7 and claims 8-12 dependent therefrom are novel, patentably distinct, and unobvious over the art of record including Swartz.

For at least the reasons given above with regard to independent claim 1, Swartz lacks any teaching or suggestion of many features set out in independent claim 7 including, without limitation, providing transformation lineage information about first source data from which the first target data object was derived via a transformation performed on the first source data and providing transformation model information of the transformation performed on the first source data to derive a first target data object, the transformation model information providing a user with transformation producing function information of the first target data object including a derivation of the first target data object from the first source data. Swartz also any teaching or suggestion of using a metadata synchronizer, detecting a change in the registered first source data as changed source data, and updating metadata in the information catalog to reflect the detected change, registering the changed source data in the information catalog, selecting a second target data object, the second target data object being related to the changed source data by the transformation performed on the changed source data to derive the second target data object, and providing updated transformation lineage information about the changed source data from which the second target data object was derived via the transformation performed on the changed source data to derive the second target data object.

Accordingly, an allowance of claims 7-12 over the art of record is respectfully requested.

Claims 13-18 are Allowable

The Examiner took the position on the top of page 7 of the Office Action that, as to claims 13-18, “these claims recited similar limitations as claims 1-6, in form of article of manufacture, hence, are rejected for the same reason.”

Without conceding the Examiner's position, applicant respectfully submits that independent claim 13 and claims 14-18 dependent therefrom are novel, patentably distinct, and unobvious over the art of record including Swartz.

For at least the reasons given above with regard to independent claim 1, Swartz lacks any teaching or suggestion of many features set out in independent claim 13 including, without limitation, providing transformation lineage information about first source data from which a first target data object was derived, providing transformation model information of the transformation performed on the first source data to derive the first target data object, the transformation model information providing a user with transformation producing function information of the first target data object including a derivation of the first target data object from the first source data. Swartz also lacks any teaching or suggestion of using a metadata synchronizer, detecting a change in the registered first source data as changed source data, and updating metadata in the information catalog to reflect the detected change, registering the changed source data in the information catalog, selecting a second target data object, the second target data object being related to the changed source data by the transformation performed on the changed source data to derive the second target data object, and providing updated transformation lineage information about the changed source data from which the second target data object was derived via the transformation performed on the changed source data to derive the second target data object.

Accordingly, an allowance of claims 13-18 over the art of record is respectfully requested.

Claim 27 is Allowable

The Examiner took the position on the top of page 7 of the Office Action that, as to claims 27 and 28, "these claims recited similar limitations as claims 1-6, in form of computer-readable storage medium or system (sic.), hence, are rejected for the same reason."

Without conceding the Examiner's position, applicant respectfully submits that independent claim 27 is novel, patentably distinct, and unobvious over the art of record including Swartz.

For at least the reasons given above with regard to independent claim 1, Swartz lacks any teaching or suggestion of many features set out in independent claim 27 including, without

limitation, providing transformation lineage information about at least one of one or more first sources of data; providing transformation model information of one or more transformations performed on the one or more first sources of data to derive a first target data object, the transformation model information providing a user with transformation producing function information of the first target data object including a derivation of the first target data object from the one or more first sources of data. Swartz also lacks any teaching or suggestion of using a metadata synchronizer, detecting a change in the registered one or more first sources of data as changed source data, and updating metadata in the information catalog to reflect the detected change; registering the changed source data in the information catalog; selecting a second target data object, the second target data object being associated with the changed source data by the one or more transformations performed on the changed source data to derive the second target data object; and, providing updated transformation lineage information about the changed source data from which the second target data object was derived via the one or more transformations performed on the changed source data to derive the second target data object.

Accordingly, an allowance of claim 27 over the art of record is respectfully requested.

Claim 28 is Allowable

The Examiner took the position on the top of page 7 of the Office Action that, as to claims 27 and 28, “these claims recited similar limitations as claims 1-6, in form of computer-readable storage medium or system (sic.), hence, are rejected for the same reason.”

Without conceding the Examiner’s position, applicant respectfully submits that independent claim 28 is novel, patentably distinct, and unobvious over the art of record including Swartz.

For at least the reasons given above with regard to independent claim 1, Swartz lacks any teaching or suggestion of many features set out in independent claim 28 including, without limitation, a transformation model information system which provides information of the one or more transformations performed on the one or more first sources of data; and, a metadata synchronizer configured to detect a change in the one or more first sources of data as changed one or more sources of data, wherein the transformation lineage system is configured to provide updated transformation lineage information about the changed one or more sources of data in

response to selection of a second target data object, the second target data object being related to the changed one or more sources of data by the one or more transformations performed on the changed one or more sources of data to derive the second target data object.

Accordingly, an allowance of claim 28 over the art of record is respectfully requested.

CONCLUSION

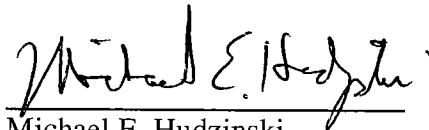
In accordance with the afore-noted amendments and comments, it is submitted that all claims are patentably distinct over the art, and in condition for allowance thereover. An early allowance of all claims is respectfully requested.

If there are any fees necessitated by the foregoing communication, the Commissioner is hereby authorized to charge such fees to our Deposit Account No. 09-0460, referencing our Docket No. STL919980004US2 (formerly ST9-98-004).

Respectfully submitted,

Date:

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